

MONTGOMERY COUNTY DEPARTMENT OF POLICE



FALSE ALARM REDUCTION PROGRAM 2018 ANNUAL REPORT

MARCH 2019

OVERVIEW

The False Alarm Reduction Section (FARS) of the Montgomery County Department of Police was created to administer Chapter 3A, Alarms, of the Montgomery County Code and reduce the number of false alarms that police must respond to each year. False alarms can take police officers and other public safety personnel away from other events, endangering responding authorities and the community, and wasting public resources.

In 2018, there were a total of **10,158 requests** for dispatch to which police did not respond, thus reducing the negative impact of false alarms on the quality of service and safety. Although this was an 18% increase compared to 2017, the FARS was still working through issues associated with the conversion to the new Computer Aided Dispatch (CAD) system that went live in 2016. The time saved by Montgomery County Police by not responding to these cancelled alarms equates to approximately **5,352 work hours**.¹

The number of new alarm users decreased slightly in 2018 compared to previous years. There were about **6,200** new alarm users in 2018, which was about a **6%** decrease compared to 2017. In the more than 24 years since the program was initiated, the section has consistently increased the number of alarm users who experience zero false alarms. **In 2018, over 79,000 alarm users, or 87%, had zero false alarms.**

Despite the technical challenges affecting the section, the FARS was still able to reduce false alarms and increase the number of alarm users with zero false alarms – all positive signs. The *total* number of registered alarm users continues to rise, and, despite the significant increase in registered users and the need to respond to more calls in 2018, police officers responded to *fewer* alarm calls in 2018 than in 1994 when the enforcement of the amended burglar alarm law went into effect. These statistics, coupled with a 209% increase in the number of registered alarm users over the same period, demonstrates that substantial and *sustained* false alarm reduction has been achieved.

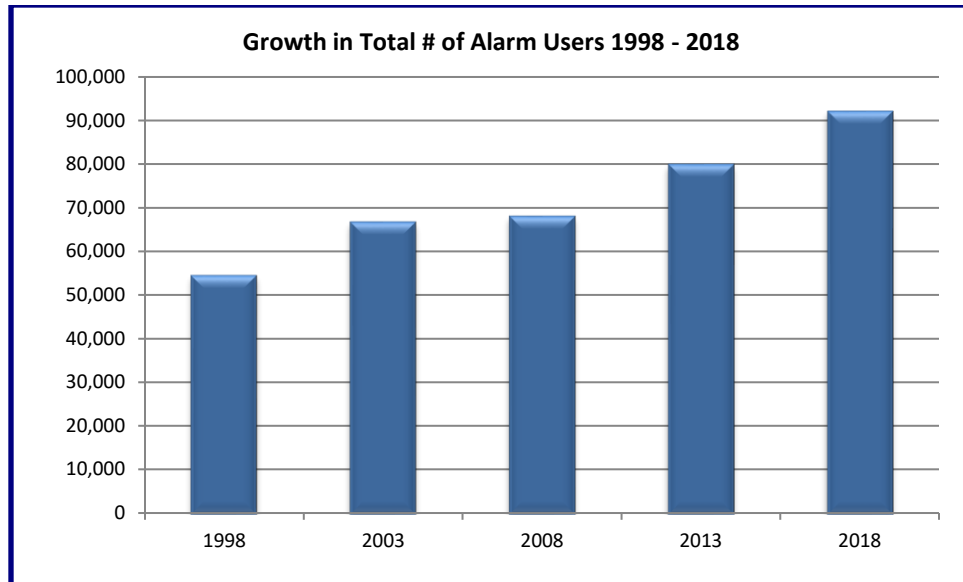
The FARS staff plans to continue its amplified enforcement initiative and remain in the forefront as subject matter experts in the field of false alarm management and reduction.

2018 FALSE ALARM REDUCTION

Alarm Users

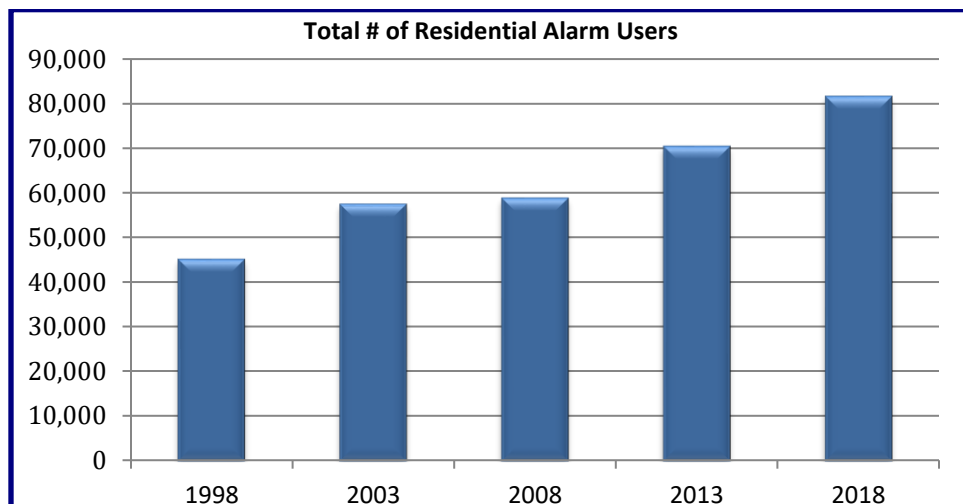
Montgomery County is the most populous jurisdiction in the state of Maryland, consisting of nearly 1.1 million residents. In 2018, FARS received a total of 6,157 new alarm user registration forms (residential and commercial). There was about a 7.0% decrease in the total number of registered alarm users between 2017 and 2018, accounting for more than 91,800 users.

¹ This figure is based on the average time of 16 minutes each for two officers per alarm call.



The alarm user registration renewal process permits FARS to keep the alarm user database current by removing those users who no longer have an alarm system or have moved from the county. This allows FARS to perform statistical analysis using more accurate numbers, which provides for more meaningful reporting.

Overall, Montgomery County has experienced a 209% increase in total alarm registrants since 1994, driven primarily by the number of residential alarm users – more than 81,300 users - an increase of 177% since 1995.

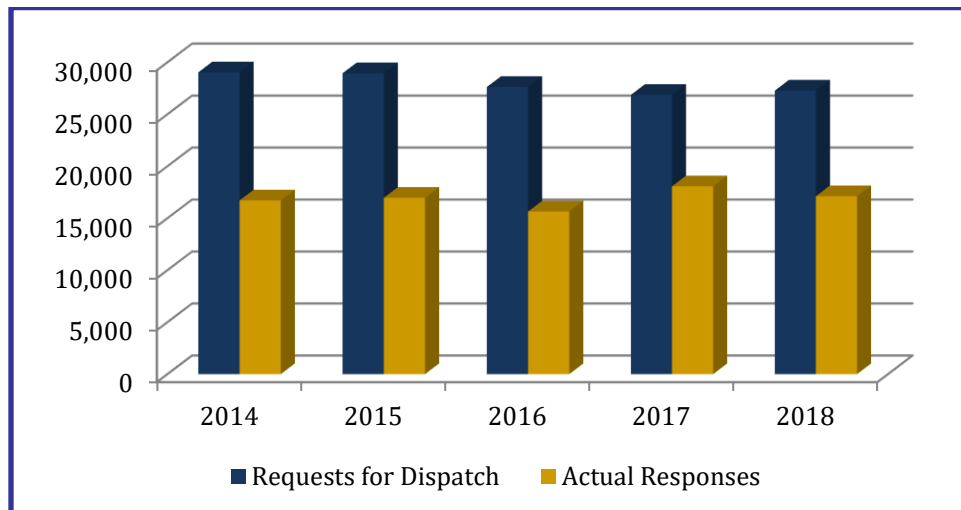


Alarm Responses

A false alarm is an alarm system activation that results in a dispatch request that is not cancelled prior to the arrival of law enforcement at the site and in which the responding authority finds no evidence of criminal activity to justify a police response. There are several common causes of false alarms:

- Inadequate training of those allowed access to the system, including accidental alarms caused by house/pet sitters, house cleaners, contractors, etc.
- Pets.
- Weak or depleted system batteries.
- Open, unlocked, loose-fitting, or defective door/window sensors.
- Drafts from air conditioners/heaters or open windows that cause movement of plants, curtains, etc.

The graph below shows the number of requests for dispatch versus actual responses. *Requests for dispatch* include the number of times that an alarm monitoring company calls 9-1-1. *Actual response totals* include the number of times that an officer arrives at a location and investigates the cause of the alarm. Alarm companies are required to cancel a police response when they determine that the alarm activation is false or a response is not needed. **In 2018, alarm companies cancelled 6,221 requests for dispatch or 23% of the total requests for dispatch.** These cancellations provided officers with more time to engage in other more critical law enforcement activities and community policing initiatives.



Historically, the number of dispatch requests has been declining: the numbers have dropped about 42% over the last 20 years and about 6% over the last five years. In 2018, the number of dispatch requests increased slightly, by about 1.5%, from 26,867 in 2017 to 27,276. The number of actual responses to alarm calls decreased by about 950, which was a decrease of about 5.27% in 2018 compared to 2017. Although there was a decrease in responses between 2017 and 2018, the decreased number was still abnormally high overall as the FARS continued to encounter data transmission issues with a database with which the FARS is integrated. To ensure that the citizens of the county were served properly, a decision was made to respond to all calls for about an eight-month period. As a result, the percentage of dispatch requests that resulted in a response was higher (63%) in 2018 than in 2016 when the percentage was 56.6%. This number will decrease significantly in the year to come, as all technical issues have been resolved.

False Alarm Rates

The false alarm rate is the most common measure of false alarm reduction as it calculates the number of false alarm dispatches relative to the total number of alarm users.

Year	Total Registered Users	Total False Alarms	False Alarm Rate
1994	29,756	42,821 ²	1.44
2003	66,474	21,452	.32
2008	67,797	15,356	.23
2013	79,696	16,441	.21
2018	89,908	14,986	.17

This table demonstrates that, although the total number of registered users has increased over the last 24 years, the false alarm dispatch rate has continued to drop. Montgomery County's dispatch rates remain among the lowest in the country.

Another measure of program effectiveness is the total number of registered alarm users who had NO false alarms. In 2018, a total of 79,909 alarm users had ZERO false alarms; essentially, 87% of all alarm users in Montgomery County successfully managed their alarm systems. This contrasts with 1995, the year after the county alarm code was implemented, when only 56.2% of the registered alarm users had no false alarms. This is a significant improvement, given the increase in the total number of users. The table below represents the false alarm numbers over the last two decades.

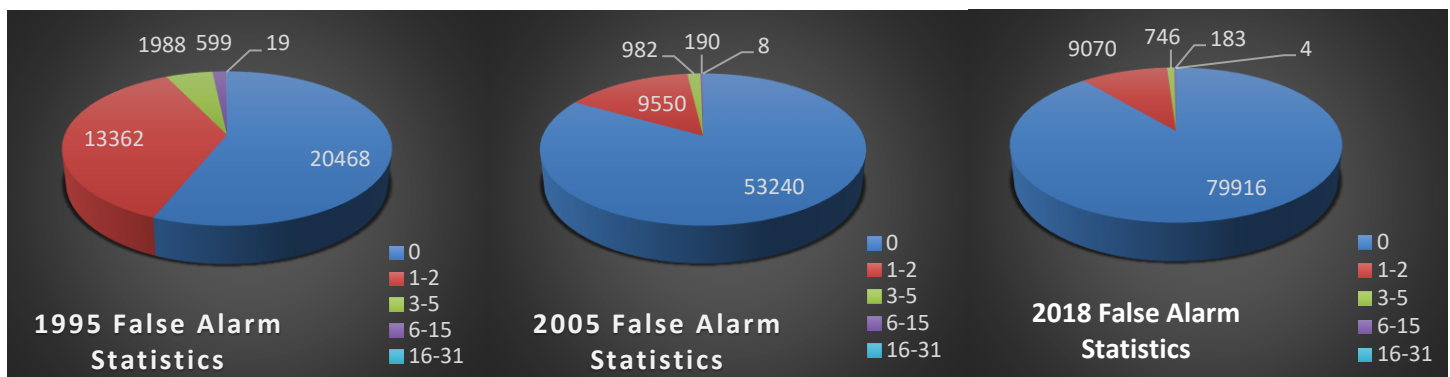
2018 <i>Total Users = 89,908</i>		2005 <i>Total Users = 63,970</i>		1995 <i>Total Users = 36,436</i>	
False Alarms	Alarm Users	False Alarms	Alarm Users	False Alarms	Alarm Users
0	79,909	0	53,240	0	20,468
1-2	9,066	1-2	9,550	1-2	13,362
3-5	746	3-5	982	3-5	1,988
6-15	183	6-15	190	6-15	599
16-31	4	16-31	8	16-31	19

A closer examination reveals that commercial alarm users have improved by 213% since 1995 in terms of eliminating false alarms, while residential users have achieved about 300% success in managing false alarms. In 1995, nearly 7% of all commercial alarm users had six or more false alarms. In 2018, there were a total of 187 alarm users that had six or more false alarms. Out of this total, 178 or 95.2% were commercial alarm users. On the residential side, there were nine alarm users or 4.8% that accounted for six or more false alarms. These numbers were roughly the same as in 2017.

² The number of verified calls for 1994 is unknown. The total number of alarm dispatches was 42,821.

Number of Users with No False Alarms				
	1995	2005	2018	% Change
Commercial	2,352	5,730	7,354	213.00
Residential	18,116	47,510	72,562	296.50

The charts below graphically show that more alarm users (as a percentage of total alarm users for a given year) are achieving the zero false alarm thresholds. This statistic, which is supported by the low false alarm rate, is indicative of the success of the overall false alarm reduction program. These reductions become more significant when viewed in the context of the steady increase in the number of alarm users each year. This is a positive measure of the program's impact on the county's resources.



Cost Avoidance

As a direct result of the FARS' strict enforcement of the alarm law, there were 10,158 alarm calls to which police officers were not required to respond in 2018. Using the averages established by the Police Department, this equates to approximately **5,352 hours of police officer time, or an estimated \$1,134,068 in cost avoidance.** Monetary cost avoidance is based on an average salary cost³ of \$113. Work year savings are based on an average of 16 minutes per alarm response by two officers.

REVENUE

The charts on the next two pages reflect the revenue collected by the FARS for alarm user registration and renewal fees, false alarm response fees, alarm business license and administrative fees, civil citations, and appeal filing fees.

The first chart covers *calendar* year 2018. The second chart covers *fiscal* year 2018. The FY2018 chart is included only as a reference because budget projections are based on fiscal

³ This includes fringe benefits, operating expenses, and vehicles but does not include costs related to policing, such as training, the cost of dispatching, etc.

rather than calendar years. The more accurate chart is the calendar year 2018 chart, as false alarms and the resulting false alarm response fees are calculated on a calendar year basis.

CALENDAR YEAR 2018	ACTUAL REVENUES
<u>Alarm User Registration Fees</u>	
Residential	\$149,985
Commercial	<u>16,640</u>
TOTAL	\$166,625
<u>Alarm User Registration Renewal Fees</u>	
Residential	\$182,105
County Attorney Collections	<u>2,273</u>
Total Residential	\$184,378
Commercial	\$ 28,240
County Attorney Collections	<u>955</u>
Total Commercial	\$29,195
TOTAL	\$213,573
<u>False Alarm Response Fees</u>	
Residential	\$ 62,848
County Attorney Collections	<u>24,928</u>
Total Residential	\$ 87,776
Commercial	\$291,119
County Attorney Collections	<u>49,255</u>
Total Commercial	\$340,374
TOTAL	\$428,150
<u>Alarm Business Fees</u>	
License	\$ 81,200
Civil Citations	354,000
Administrative Fees	<u>0</u>
TOTAL	\$435,200
<u>Appeal Filing Fees</u>	
Residential	\$ 30
Commercial	<u>30</u>
TOTAL	\$ 60
GRAND TOTAL	\$1,243,608

FISCAL YEAR 18	ACTUAL REVENUES
<u>Alarm User Registration Fees</u>	
Residential	\$154,310
Commercial	<u>16,670</u>
TOTAL	\$170,980
<u>Alarm User Registration Renewal Fees</u>	
Residential	\$169,399
County Attorney Collections	<u>2,163</u>
Total Residential	\$171,562
Commercial	\$30,210
County Attorney Collections	<u>1,025</u>
Total Commercial	\$31,235
TOTAL	\$202,797
<u>False Alarm Response Fees</u>	
Residential	\$ 61,025
County Attorney Collections	<u>25,553</u>
Total Residential	\$ 86,578
Commercial	\$256,240
County Attorney Collections	<u>85,253</u>
Total Commercial	\$341,493
TOTAL	\$428,071
<u>Alarm Business Fees</u>	
License	\$ 78,716
Civil Citations	314,500
Administrative Fees	<u>00</u>
TOTAL	\$ 393,216
<u>Appeal Filing Fees</u>	
Residential	\$ 15
Commercial	<u>60</u>
TOTAL	\$ 75
GRAND TOTAL	\$1,195,139

CALENDAR YEAR COMPARISON	ACTUAL REVENUES		
	2016	2017	2018
<u>Alarm User Registration Fees</u>			
Residential	\$167,389	\$176,320	\$149,985
Commercial	<u>16,940</u>	<u>16,085</u>	<u>16,640</u>
TOTAL	\$184,329	\$192,405	\$166,625
<u>Alarm User Registration Renewal Fees</u>			
Residential	\$192,555	\$180,081	
County Attorney Collections	<u>1,015</u>	<u>1,305</u>	\$182,105
Total Residential	\$193,570	\$181,386	<u>2,273</u>
			\$184,378
Commercial	\$29,582	\$26,669	
County Attorney Collections	<u>320</u>	<u>855</u>	\$ 28,240
Total Commercial	\$32,065	\$27,524	<u>955</u>
			\$29,195
TOTAL	\$223,472	\$208,910	\$213,573
<u>False Alarm Response Fees</u>			
Residential	\$ 74,383	\$ 61,735	\$ 62,848
County Attorney Collections	<u>9,482</u>	<u>4,070</u>	<u>24,928</u>
Total Residential	\$ 83, 865	\$ 75,805	\$ 87,776
Commercial	\$416,730	\$317,387	\$291,119
County Attorney Collections	<u>17,385</u>	<u>59,503</u>	<u>49,255</u>
Total Commercial	\$434,115	\$376,890	\$340,374
TOTAL	\$517,980	\$452,695	\$428,150
<u>Alarm Business Fees</u>			
License	\$ 65,024	\$ 70,316	\$ 81,200
Civil Citations	191,750	290,100	354,000
Administrative Fees	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	\$256,774	\$360,416	\$435,200
<u>Appeal Filing Fees</u>			
Residential	\$120	\$ 15	\$ 30
Commercial	<u>15</u>	<u>45</u>	<u>30</u>
TOTAL	\$135	\$ 60	\$ 60
GRAND TOTAL	\$1,182,690	\$1,214,486	\$1,243,608

The collection of false alarm response fees is always a priority for the FARS. Strict enforcement of this aspect of the alarm law clearly shows that Montgomery County is serious about the issue of false alarms. If alarm users fail to remit the required false alarm response fees, the FARS can place their account into denied response status. Denied response means that the police will not respond to an alarmed location until the alarmed location's financial obligation is satisfied. Also, the FARS refers these accounts to the Office of the County Attorney for collection action.

The FARS collection rate was down slightly from 89% in 2017 to 88% in 2018. The combination of the Office of the County Attorney as the FARS Collector and the suspension of police response as specified in Chapter 3A, Alarms, for failure to remit false alarm response fees greatly enhances the FARS ability to collect on unpaid bills. In 2018, staffing shortages negatively impacted the ability of the FARS to place alarm users in denied response for a period of about six months, which meant that our collection rate for 2018 was down slightly. The FARS is looking forward to having a full complement of staff in 2019 and to being able to place alarm users in denied response regularly, which will help to increase our collection percentage going forward.

The following chart reflects the amount billed for false alarm response fees in 2018 versus the amount collected for both residential and commercial alarm users. Please note that the “collected” amount in the following chart reflects payments made against false alarms that occurred in 2018. The actual collection of monies for calendar year 2018 false alarms extends into calendar year 2019 and therefore reflects different totals than the Calendar Year Revenue Chart. Furthermore, this chart concentrates on calendar year 2018 and does not account for monies received from accounts that owed for previous years.

Calendar Year 2018 Billed versus Collected False Alarm Response Fees				
False Alarm Response Fees	Billed	Collected*	Past Due (>30 & <51 days overdue)	Delinquent (>50 days overdue)
Commercial	\$336,925	\$ 303,820	\$ 2,985	\$ 31,205
Residential	\$111,200	\$ 88,995	\$ 2,200	\$ 19,940
Total	\$448,125	\$392,815	\$ 5,185	\$51,145

**Represents fees collected in 2018 and 2019 against false alarm response fees billed in 2018.*

The FARS is in the process of attempting to collect the past due amounts listed above. The FARS has sent the overdue notices to all affected alarm users. The \$51,145 listed above will be referred to the Office of the County Attorney for collection in early 2019, and the affected alarm users will be placed in a non-response status until payment is received.

CONCLUSION

Overall, the 2018 Annual Report on the status of the False Alarm Reduction Program is positive. In 2018, revenue increased slightly by about 2.4% compared to 2017, the number of dispatch requests from the alarm companies has declined by 38.0% since 1994, and the total number of responses has declined by 60% over the same time. This number is slightly lower than in 2017 but still higher than we expected. The root cause was issues with data transmission accuracy with the Computer Aided Dispatch (CAD) system that is integrated with the FARS false alarm tracking and billing system. However, even given these circumstances, alarm companies are doing better at managing and vetting the alarm systems that they install or monitor, and homeowners are being increasingly more responsible with their alarm systems.

The FARS will continue its strict enforcement of all requirements for requesting dispatch, including providing the correct alarm user registration and alarm business license numbers. The legally mandated non-response provisions of the alarm law resulted in 636 requests for dispatch that were denied as a result of the violation status of the alarm user or alarm business in 2018. This represents only 2.3% of all requests for dispatch in 2018, which is a decrease compared to 2017 when the percentage was 3.8%. This decrease is directly correlated with the temporary inability of FARS to deny dispatch as mandated by the non-response provisions in the alarm law due to the data transmission concerns between the FARS false alarm tracking and billing system and the CAD system at the Emergency Communications Center.

There must be a continued effort to provide education and early intervention to alarm users who are experiencing false alarms so that these unnecessary alarm calls do not reach unacceptable thresholds and waste valuable resources. In 2018, the FARS continued its enforcement efforts in the major offender project, which reaches out to alarm users experiencing excessive false alarms. The major offender project is instrumental in ensuring that alarm users experiencing excessive false alarms are educated about their alarm system and the impact on police resources. The number of alarm users that were in the 16 to 31 false alarm counts decreased by 20% in 2018 compared to 2017, down to only four commercial alarm users. In 2019, the FARS staff will continue its ramped-up efforts to intervene and educate alarm users that fall into this category quickly and expeditiously to ensure that we continue to reduce the number of alarm users in this range.

In April 2017, the Emergency Communications Center (ECC) went live with their Motorola Premier One CAD system. The FARS worked cohesively with the ECC to identify and remedy any discrepancies between our current CryWolf false alarm tracking and billing system and the new Motorola Premier One CAD system. However, due to some integration issues between the two systems, management mandated that police be dispatched to all alarm calls regardless of the stipulations set forth by Chapter 3A, Alarms, of the Montgomery County Code. As a result, police officers responded to about 1,960 (11.4%) more false alarm calls in 2018 than in 2017. This effort was put in place to ensure that the citizens of Montgomery County were properly served while the technical discrepancies between the two systems were resolved. As of January 4th, 2019, all technical discrepancies have been resolved, and the ECC has resumed normal operations with respect to alarm calls.

In 2018, in conjunction with the Patrol Services Bureau (PSB) command staff, the FARS coordinated with respective command staff to provide false alarm training for all district station and city municipality patrol officers during Roll Call meetings for each shift. The FARS identified and shared patterns observed throughout the year. Additionally, conversations with various officers highlighted the fact that the FARS was an unknown entity working behind the scenes. The overall goal of the training was to educate the patrol units on the alarm law and to ensure that they understood how vital their role is in enforcing compliance with the alarm law. Everyone doing their part helps the FARS to gain the compliance of alarm users and alarm businesses alike.

Looking ahead to 2019, we reviewed the Executive Regulation and identified areas that needed to be updated to make it current with today's standards. The revised Executive Regulation was submitted to the County Council at the end of December 2018 and was listed in the Register for one month starting on January 1st, 2019. It has now been moved into the next phase of the process, and we are hopeful it will be accepted as amended. Furthermore, the FARS will continue its efforts to pioneer new strategies to reduce the wasted allocation of resources by increasing instruction to involved stakeholders, including the ECC and the PSB, by identifying targeted discrepancies, and by engaging with users and alarm companies through timely correspondence.